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ELECTRONIC PACKAGE WITH INTEGRATED CAPACITOR

Abstract of Disclosure

An electronic package including a conductive trace layer having a first side and a second side. The conductive trace layer is patterned to define a plurality of interconnect pads. A flexible dielectric substrate is mounted on the first side of the conductive trace layer. A flexible capacitor including a first conductive layer, a second conductive layer and a layer of dielectric material disposed between the first and the second conductive layers is mounted with the first conductive layer adjacent to the second side of the conductive trace layer. A plurality of interconnect regions extend through the first conductive layer and the dielectric material layer of the capacitor. An interconnect member is connected between each one of the conductive layers of the capacitor and a corresponding set of the interconnect pads. The first conductive layer of the capacitor is electrically connected to a first set of the interconnect pads and the second conductive layer of the capacitor is electrically connected to a second set of the interconnect pads. The interconnect members corresponding to the second set of interconnect pads extend through one of the interconnect regions. An aperture extends through the dielectric substrate adjacent to each one of the interconnect pads. A stiffening member is mounted adjacent to the second conductive layer of the capacitor. A device receiving region is formed through the dielectric substrate, the conductive trace layer and the capacitor.